

## CLAIMS

- 1. An expression cassette comprising:
- a) a promoter derived from the polyhedrin promoter of a baculovirus by deletion of all or part of the region of said promoter extending from positions -1 to -12 relative to the polyhedrin translation initiation site;
  - b) a sequence encoding a receptor with seven transmembrane domains, placed under the transcriptional
- 10 control of said promoter.
  - 2. The expression cassette as claimed in claim 1, characterized in that it also comprises, upstream of the sequence b), a sequence encoding a signal peptide.

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3. The expression cassette as claimed in either one of claims 1 and 2, characterized in that said receptor with seven transmembrane domains is an olfactory receptor.

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- 4. A method for expressing a receptor with seven transmembrane domains in an insect cell, characterized in that said insect cell is infected with a recombinant baculovirus comprising an expression cassette as claimed in any one of claims 1 to 3.
- 5. The method as claimed in claim 4, characterized in that a G protein is also expressed in the same insect

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cell.

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- 6. The method as claimed in claim 5, characterized in that said G protein is expressed under the control of the promoter of the P10 gene of a baculovirus.
- 35 7. The method as claimed in claim 6, characterized in that use is made of a double-recombinant baculovirus comprising:
  - an expression cassette as claimed in any one of

claims 1 to 3; and

- a sequence encoding a G protein placed under the transcriptional control of the promoter of the P10 gene of said baculovirus.

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- 8. A recombinant baculovirus comprising an expression cassette as claimed in any one of claims 1 to 3.
- The recombinant baculovirus as claimed in claim 8,
  characterized in that said expression cassette is inserted as a replacement for the polyhedrin promoter and gene of said baculovirus.
- 10. The recombinant baculovirus as claimed in claim 9, 15 characterized in that said baculovirus also comprises a sequence encoding a G protein placed under the transcriptional control of the promoter of the P10 gene.
- 20 11. An insect cell infected with a recombinant baculovirus as claimed in any one of claims 8 to 10.
  - 12. The use of an insect cell as claimed in claim 11, for determining the functionality of a putative receptor with seven transmembrane domains.
    - 13. The use of an insect cell as claimed in claim 11, for identifying the ligand(s) for an orphelin receptor with seven transmembrane domains.

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14. The use of an insect cell as claimed in claim 11, for identifying (a) receptor(s) with seven transmembrane domains capable of binding to a ligand of interest.

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15. The use as claimed in any one of claims 12 to 14, characterized in that said receptor with seven transmembrane domains is an olfactory receptor.